

ABSTRACT OF THE DISCLOSURE

5 An etchant for etching at least one of a titanium
material and silicon oxide includes a mixed liquid of
HCl, NH_4F and H_2O . When the etchant has a $\text{NH}_4\text{F}/\text{HCl}$ molar
ratio of less than one, only the titanium material is
etched. When the etchant has a $\text{NH}_4\text{F}/\text{HCl}$ molar ratio of
more than one, only silicon oxide is etched. When the
10 etchant has a $\text{NH}_4\text{F}/\text{HCl}$ molar ratio of one, the titanium
material and silicon oxide are etched at the same rate.